

**LUNENBURG DPW BUILDING COMMITTEE  
TOWN OF LUNENBURG**

David MacDonald, Chair  
Joanna Bilotta, Vice-Chair  
Jay Simeone, Clk.  
James Breault, Mbr.  
Janice Carrier, Mbr.  
Steve deBettencourt, Mbr.  
Leigh Mezzetti, Mbr.



Minutes

**November 19, 2010  
Ritter Building Lower Conference Room  
960 Massachusetts Ave  
Lunenburg, MA 01462**

Meeting Posted: Yes  
Meeting Call to order at 4:35

A handwritten signature in black ink, consisting of a large, stylized initial 'J' followed by a long, sweeping horizontal line that extends to the right.

**RECEIVED & FILED**

**FEB 01 2011**

**LUNENBURG TOWN  
CLERK OFFICE**

Some concerns of the plan are the location of the septic system. Gregg is looking at 30 Ft. by 50 Ft. septic field with a cost of around \$50,000.00

Existing building: Building code would require modification to the roof channels to help with the snow load depending on height of new addition. Square footage of the mezzanine is tied into the size of the new addition. Gregg commented that the height of the new addition will have an effect on the snow load over the existing garage and office area, and that will have an effect for the structural integrity of the existing roof and mezzanine area.

Existing office area: Demolition of the office area will be done and a new office area created. Some concerns of the office area are: Bathrooms, cubical layout, location of the new stairs for the mezzanine, the size of break room and conference room, file storage. The committee recommended eliminating the existing back stairs to the mezzanine.

Maintenance Garage: Jay recommends blocking off the side garage door and adding a wall for tool room and mechanics office. He also recommends the block wall separating the maintenance garage from the parking garage.

The committee also reviewed the heating and utility system for existing garage, office, and new addition.

The committee reviewed the rendering image of the new building.

The rendering shows the existing building in a tan and brown motif and the new addition being green and brown. A covered overhang over the office entrance.

The new addition has a 4 foot concrete knee wall around it with concrete aprons in front of all garage doors.

The committee then reviewed the budget figures. The budget was broken down into 17 divisions the proposed grand total was \$1,840,891. Gregg proposes this to be a 5 month project.

The committee went line item by line item with Gregg to go over all cost figures.

Jan Carrier noted that she has spoken to the Fire Chief Glenn, in regards to a waiver for the sprinkler system in the building. Per Jan, Chief Glenn stated a variance would need to be obtained from the State.

General Discussion: Scope of work.

The committee went through the budget figures to look at areas that could be reduced or eliminated to get the budget cost down to the approved budget for the building of \$990k. There was an error of \$70K on one of the line items that Gregg is going to revise.

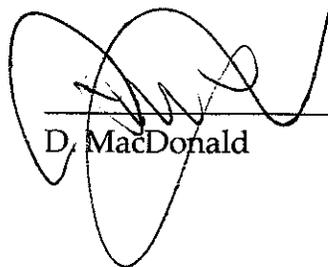
There was considerable decision around the mezzanine, the structural layout of the roof, and how to tie them in with the new addition. The committee feels the office area and mezzanine are important aspects of the project. After considering many options and alternatives, the committee could not see a responsible way to reduce the proposed budget figures, and still keep the integrity of the original building plan. The committee hired Gregg of HKA Architects based on his original conceptual plan he presented to the committee. While the committee liked the conceptual plan Gregg submitted, the cost of the plan is unacceptable. The committee made it clear to Gregg that we have an approved budget figure of \$990K. Gregg needs submit a plan that reflects the needs of the DPW, as outlined in the DPW Building Study proposal, and come in with the Town approved budget figure.

The next meeting will be on Thursday, 12-09-10, at the Ritter Memorial Building @ 4:30 pm.

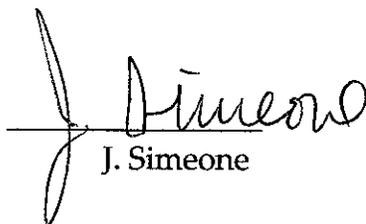
Motion to adjourn at 7:16 pm.

Respectfully Submitted by:

Jay Simeone  
Secretary



D. MacDonald



J. Simeone

**MEETING MINUTES**  
**DPW ADDITION/RENOVATIONS**  
Town of Lunenburg  
Ritter Memorial Building  
960 Massachusetts Avenue, Lunenburg, MA

**CONCEPTUAL DESIGN REVIEW MEETING**  
19 November 2010 at 4:30 p.m.

**Attendees:** Dave MacDonald – Town of Lunenburg (TOWN)  
Joanna Bilotta – TOWN  
Kerry Speidel – TOWN  
Jan Carrier – TOWN  
Steve DeBettencourt – TOWN  
Jay Simeone - TOWN  
Jack Rodriquez – TOWN DPW  
Jim Beault – TOWN DPW  
Leigh Mezzetti – TOWN DPW  
Gregg Yanchenko - HELENE-KARL Architects (HKA)  
cc: Laura Williams - TOWN  
Kevin Seaman – Seaman Engineering Corp. (SEC)  
Chris Robinson – SEC  
John Murphy – John J. Murphy Jr. Electrical Construction and Engineering, Inc. (JME)  
Bob Lie – Lin Associates, Inc. (LIN)  
Bill Murray – PLACES Site Consultants, Inc. (PSCL)

**Purpose:**

To review the schematic design submission and scope.

**ACTION**

**COMMENTS**

HKA distributed copies of the conceptual design package to the TOWN. The submission included drawings A-1 to A-5 and H-1 dated 11/19/10, rendering images 1 and 2, conceptual site plan dated 11/10/10 and conceptual cost estimate dated 11/19/10 (see attached). Issues discussed and the TOWN's comments were as follows:

**Design Issues:**

- HKA/Town
1. HKA opened the discussion by reviewing the scope of work discussed at the Project kick-off meeting on 10/21/10.
    - a. HKA confirmed that the construction budget is \$990K. Note: The TOWN appropriation for the Project is for \$1.1M.
    - b. The TOWN will review the sprinkler system waiver with the Town's Fire Department due to the limited water capacity at the site. The TOWN will coordinate a flow test on the existing well. The TOWN indicated that HKA may need to prepare a letter regarding the water capacity.
  2. Subsequent to the general discussion, HKA presented the conceptual design submission.
    - a. Civil – HKA noted that the new septic system will need a leach field approximately 30'x50' in size. As shown on the drawing, the factors governing the location of the septic system are the utility easement, the 100 year flood plain location and wetlands buffer zones. In particular, the system cannot be installed

**ACTION**

**COMMENTS**

in the 100 year flood plain or the 100' wetlands buffer zone. In addition, HKA noted that the ground water elevation will impact the system design. [Note: HKA indicated that the existing building is located at the intersection of three zoning districts.] Based on the limits, HKA does not recommend that the septic system be installed near the existing fuel pumps in order to avoid any potential environmental issues (TOWN concurred). The potential septic system locations are behind the existing building, under the existing sand pile (requiring the sand pile to be removed) or up on the hillside. Other than the sand pile location, the other locations will require a pumped system due to the elevation changes. The basic system will cost approximately \$30K and the pump chamber will add \$20K for a total cost of \$50K.

- b. Structural – The code requires that the existing building be “structurally upgraded” if significant renovations occur. In particular, the edges of the roof deck will need to be reinforced if the roof is replaced. HKA indicated the cost will be approximately \$10K to reinforce the roof perimeter. Likewise, HKA proposes a “flat” roof for the new addition to eliminate any structural upgrades of the existing roof due to snow drifting. HKA indicated that the proposed addition is approximately 2'-10" feet above the existing structure. The snow drift distance is calculated at twice the height of the adjacent building. Hence, the drift area will be approximately 6'-0" and will not require the existing roof to be upgraded.
- c. Architectural – HKA proposes 19'-0" wide vehicle bays and a new mezzanine. HKA indicated that the mezzanine will be attributed to the new building in order to meet the code requirements on allowable areas. Access to the mezzanine will be via stairs adjacent to the Break Room. In addition, HKA proposes a unisex shower to comply with the code. The other proposed areas satisfy the requirements of the original Town program.
- d. Mechanical and Electrical – HKA presented the conceptual layout for the heating system consisting of unit heaters and radiant heat in the garage areas. HKA also indicated that the plumbing will be completely upgraded to include an oil/water separator in the garage and a new electric service will be installed.

HKA

- 3. Subsequent to the general overview, the TOWN's comments were as follows.
  - a. Eliminate the stair to the existing stairs to the mezzanine.
  - b. Expand the Break Room by moving the stairs into the Wash Bay (straight run).
  - c. Block the overhead door at the end of the existing building and create a Mechanic's Office and Tool Room.
  - d. Keep the washer and dryer in the existing Garage as shown.
  - e. Provide the personnel lockers as shown.

HKA

- 4. HKA then presented the conceptual construction cost estimate and advised the TOWN that the scope of work will need to be prioritized. HKA's preliminary cost estimate is \$1.8M. HKA indicated that the City of Worcester recently bid a new 12,000 SF DPW facility and the low bid was \$950K. [Note: HKA acknowledged a typo in the cost estimate for the VCT in the amount of \$80K. If corrected, the overall estimate will be closer to \$1.72M.] HKA noted that the line items driving the costs are the flat roof on the new structure, replacing the existing roof, wash bay equipment and the new mezzanine (totaling approximately \$350K).

The TOWN indicated that the overall cost must be reduced to \$1.1M including design fees, construction and contingencies. The TOWN indicated that the wash bay equipment, new roof for the existing structure and new mezzanine were not in the

**ACTION**

**COMMENTS**

original budget presented at Town Meeting. The TOWN also indicated that the new vehicle garage bays were smaller. However, the scope must include new heating and new overhead doors and new windows in the existing structure. The TOWN directed HKA to make the following changes.

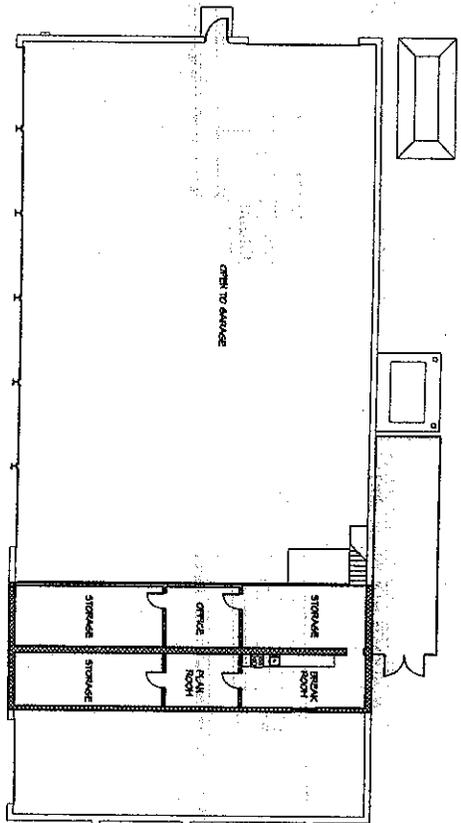
- a. Reduce the size of the new vehicle garage bays.
- b. Include the roof on the existing structure as an Add Alternate.
- c. The TOWN will complete the exterior painting of the existing structure under a separate contract.
- d. Do not replace the concrete apron at the existing structure and eliminate the proposed bollards. Also, reduce the concrete apron at the new addition to be 48" similar to the existing structure.
- e. Eliminate the wash bay addition and structure behind the Break Room. Relocate the drain for the wash bay in the main garage addition.
- f. Eliminate the new mezzanine.
- g. Limit the radiant heating system to the Mechanic's Bay only and use unit heaters in the other locations.
- h. Consider the interior masonry walls as an Add Alternate.

*Administrative Issues:*

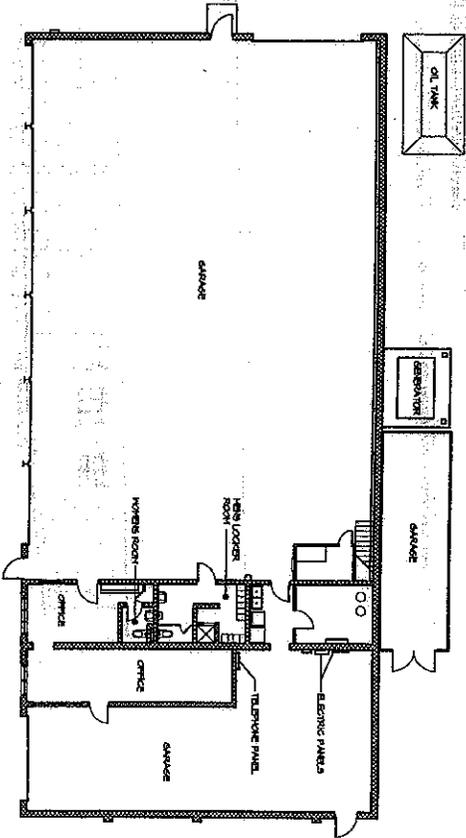
- HKA 5. The TOWN requested that HKA electronically distribute the meeting minutes to the entire Building Committee.
- 6. The TOWN confirmed that the existing structure has been tested for asbestos and there are no hazardous materials in the existing building.
- HKA/TOWN 7. HKA will coordinate a date and time to dig test pits for the structure and septic system.
- All 8. The next submission and meeting has tentatively been scheduled for **12/9/10 at 4:30 p.m.**

The information, herein, reflects HKA's understanding of decisions reached at the meeting noted. Please contact our office within seven calendar days if you have any questions or are not in agreement with the minutes.





1 EXISTING MEZZANINE LEVEL FLOOR PLAN  
SCALE 1/8"=1'-0"



2 EXISTING GROUND FLOOR PLAN  
SCALE 1/8"=1'-0"

PROGRESS SET  
NOT FOR CONSTRUCTION



TOWN OF LUNENBURG  
DWY ADDITION / RENOVATIONS

DESIGN:  
TOWN OF LUNENBURG, MA  
LUNENBURG, MA 01543

ARCHITECT:  
HELENE-KARL  
PROJECTS, INC.

OWNER:  
CITY OF LUNENBURG  
110 WASHINGTON STREET, SUITE 200  
LUNENBURG, MA 01543  
PLANNING & ZONING DEPARTMENT  
LUNENBURG, MA 01543  
DATE: 08/20/2013  
DRAWN BY: J. BROWN  
CHECKED BY: J. BROWN  
SCALE: AS SHOWN  
PROJECT NO.: 13-001  
SHEET NO.: 13-001-01

NO.	DATE	DESCRIPTION
1	08/20/13	ISSUED FOR PERMIT
2	08/20/13	ISSUED FOR CONSTRUCTION
3	08/20/13	ISSUED FOR CONSTRUCTION
4	08/20/13	ISSUED FOR CONSTRUCTION
5	08/20/13	ISSUED FOR CONSTRUCTION
6	08/20/13	ISSUED FOR CONSTRUCTION
7	08/20/13	ISSUED FOR CONSTRUCTION
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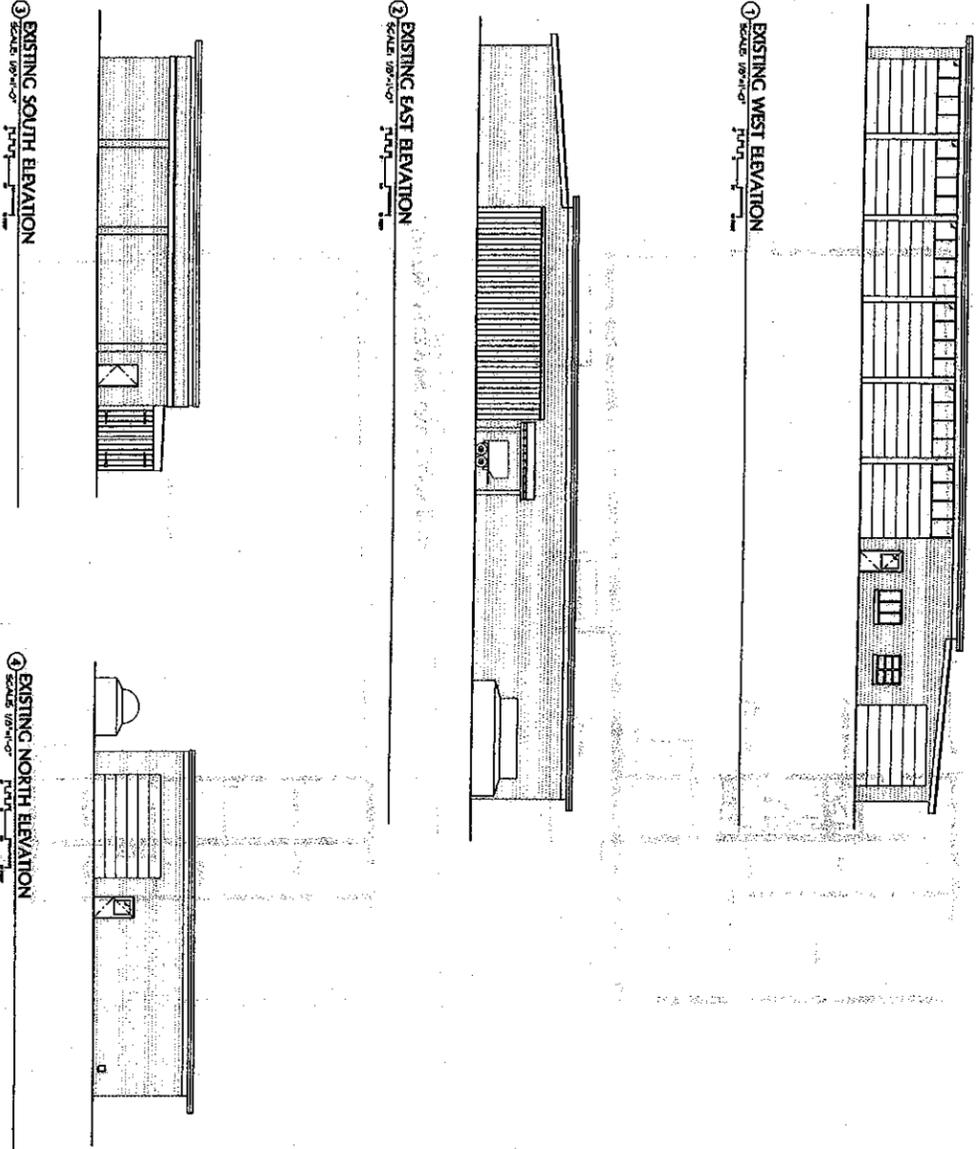


**TOWN OF LUNENBURG**  
 PLAN, ADDITION /  
 RENOVATIONS

OWNER:  
 TOWN OF LUNENBURG, VA  
 LUNENBURG, VA 22080

ARCHITECT:  
**HERBEN-KARL**  
 ARCHITECTS, INC.  
 4100 W. CREEK DRIVE  
 SUITE 100  
 WASHINGTON, VA 22192

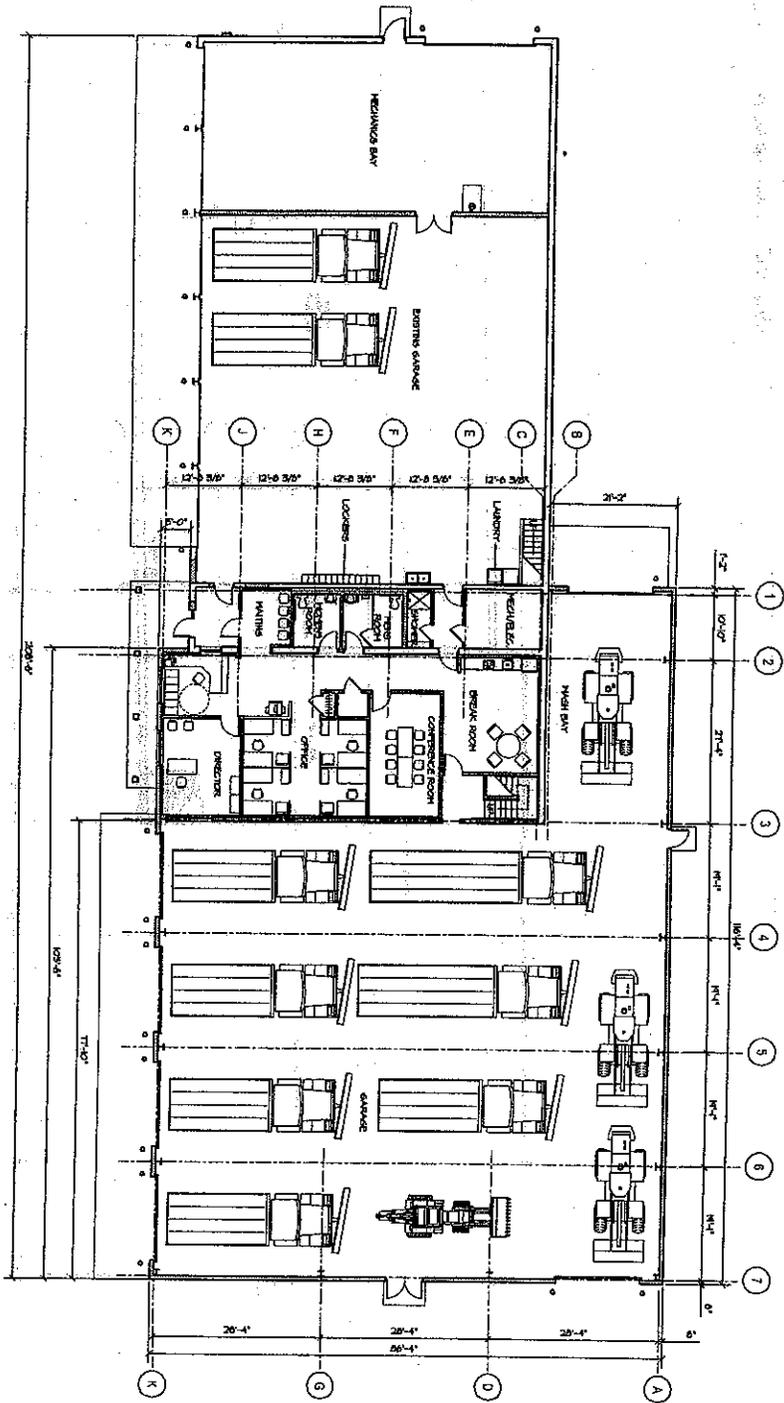
DATE: 08/20/2014  
 PROJECT: PUBLIC WORKS  
 PROJECT NO.: 14-001  
 SHEET NO.: 14-001-01  
 SHEET TITLE: EXISTING ELEVATIONS  
 DRAWN BY: J. W. WILSON  
 CHECKED BY: J. W. WILSON  
 DATE: 08/20/2014  
 SCALE: AS SHOWN  
 DATE: 08/20/2014  
 PROJECT: PUBLIC WORKS  
 PROJECT NO.: 14-001  
 SHEET NO.: 14-001-01  
 SHEET TITLE: EXISTING ELEVATIONS  
 DRAWN BY: J. W. WILSON  
 CHECKED BY: J. W. WILSON  
 DATE: 08/20/2014  
 SCALE: AS SHOWN



**PROGRESS SET  
 NOT FOR CONSTRUCTION**

NO.	DESCRIPTION	DATE	BY	CHECKED
1	EXISTING ELEVATIONS	08/20/2014	J. W. WILSON	J. W. WILSON
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PROPOSED GROUND FLOOR PLAN  
 SCALE: 1/8" = 1'-0"



PROGRESS SET  
 NOT FOR CONSTRUCTION

Project No.	10000000000000000000
Sheet No.	A3
Scale	1/8" = 1'-0"
Date	
Author	
Checker	
Appr.	
Disc.	
Notes	
Revised	
By	
Date	
Checked	
Date	
Approved	
Date	

**TOWN OF LUNENBURG**  
 DPW ADDITION / RENOVATIONS

**HELENE KABL**  
 ARCHITECT, INC.

10000000000000000000  
 10000000000000000000

OWNER: TOWN OF LUNENBURG, VA  
 22070  
 10000000000000000000

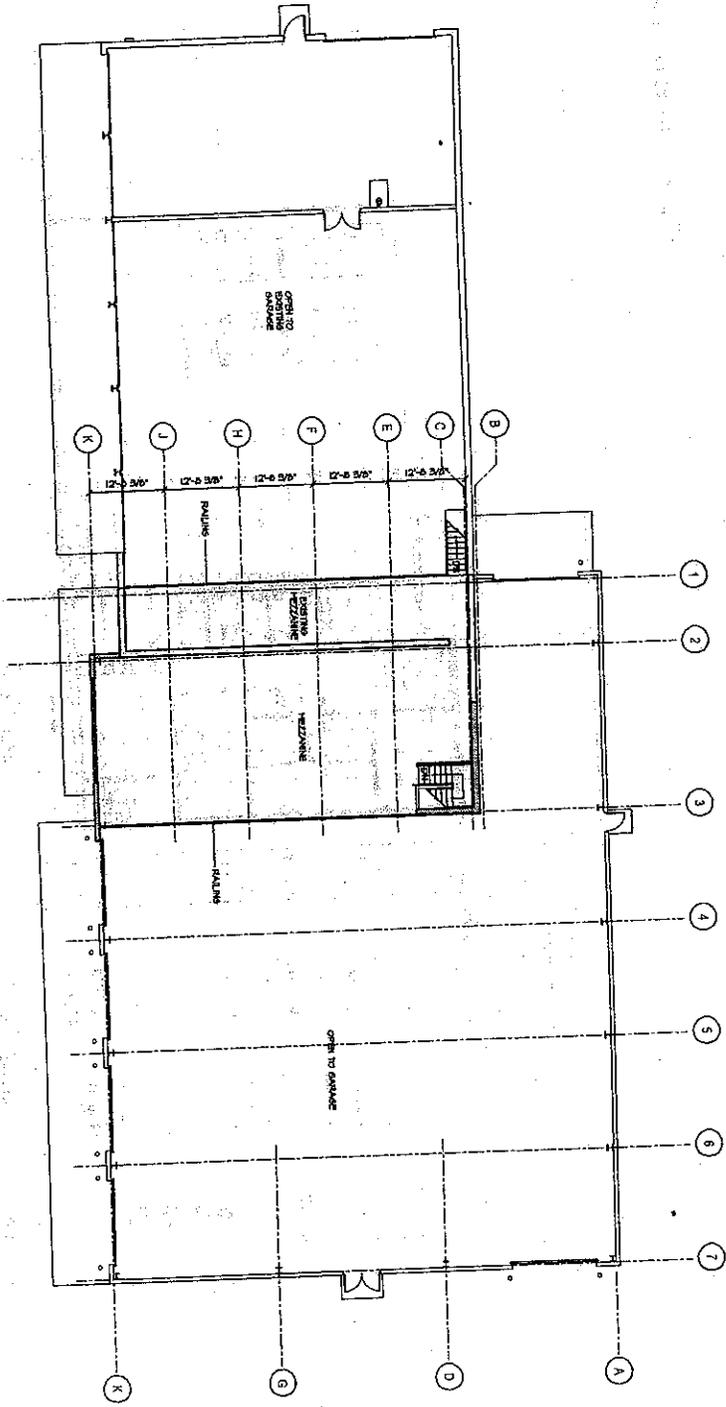
ARCHITECT: HELENE KABL ARCHITECT, INC.  
 10000000000000000000  
 10000000000000000000

ENGINEER: JAMES W. HARRIS, P.E.  
 10000000000000000000  
 10000000000000000000

MECHANICAL ENGINEER: JAMES W. HARRIS, P.E.  
 10000000000000000000  
 10000000000000000000

ELECTRICAL ENGINEER: JAMES W. HARRIS, P.E.  
 10000000000000000000  
 10000000000000000000

PROPOSED MEZZANINE LEVEL FLOOR PLAN  
 SCALE: 1/8" = 1'-0"



PROGRESS SET  
 NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION
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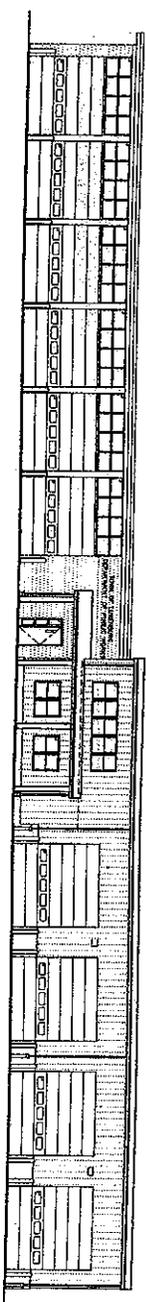
**TOWN OF LUNENBURG**  
 DRW ADDITION / RENOVATIONS

**HELENE KARL**  
 ARCHITECT

CIVIL ENGINEER  
 PLUMBING AND MECHANICAL CONTRACTORS  
 ELECTRICAL CONTRACTORS  
 MECHANICAL ENGINEERS  
 STRUCTURAL ENGINEERS  
 LANDSCAPE ARCHITECTS  
 ARCHITECTS  
 INTERIOR DESIGNERS  
 ENVIRONMENTAL ENGINEERS  
 GEOTECHNICAL ENGINEERS  
 HISTORIC PRESERVATION  
 LANDSCAPE ARCHITECTS  
 PLANNING  
 PROFESSIONAL ENGINEERS

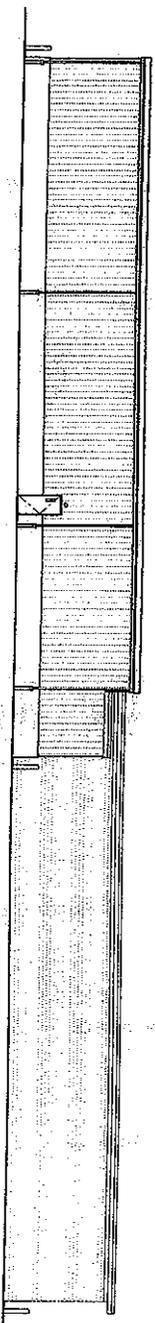
OFFICE: LUNENBURG, VA  
 100 N. MARKET STREET, SUITE 100  
 LUNENBURG, VA 22093

PROJECT: TOWN OF LUNENBURG  
 DRAWING: MEZZANINE LEVEL FLOOR PLAN

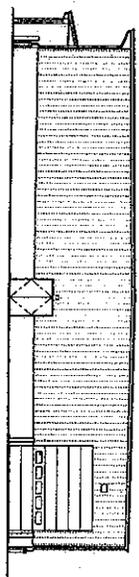


① PROPOSED WEST ELEVATION  
SCALE 1/8"=1'-0"

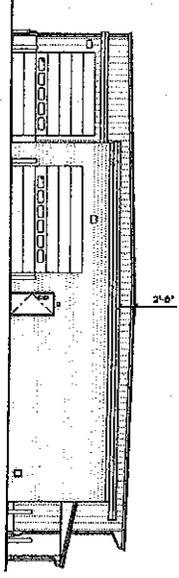
MEZZAINE FLOOR  
ELEV. 10.0'-0"  
GARAGE FLOOR  
ELEV. 0.0'-0"



② PROPOSED EAST ELEVATION  
SCALE 1/8"=1'-0"



③ PROPOSED SOUTH ELEVATION  
SCALE 1/8"=1'-0"



④ PROPOSED NORTH ELEVATION  
SCALE 1/8"=1'-0"

PROGRESS SET  
NOT FOR CONSTRUCTION



TOWN OF LUNENBURG  
DPW ADDITION / RENOVATIONS

OWNER  
TOWN OF LUNENBURG, MA  
LUNENBURG, MA 01462

ARCHITECT  
HELENE-KARL  
2000 STATE ST.  
LUNENBURG, MA 01462

DATE: 08/20/2024  
PROJECT NO: 24-001  
DRAWING NO: 01  
DRAWN BY: J. W. WILSON  
CHECKED BY: J. W. WILSON  
SCALE: AS SHOWN  
SHEET NO: 1 OF 1  
PROJECT: DPW ADDITION / RENOVATIONS  
OWNER: TOWN OF LUNENBURG, MA  
ARCHITECT: HELENE-KARL  
DATE: 08/20/2024

NO.	DESCRIPTION	DATE	BY
1	PROPOSED WEST ELEVATION	08/20/2024	J. W. WILSON
2	PROPOSED EAST ELEVATION	08/20/2024	J. W. WILSON
3	PROPOSED SOUTH ELEVATION	08/20/2024	J. W. WILSON
4	PROPOSED NORTH ELEVATION	08/20/2024	J. W. WILSON



TOWN OF LUNENBURG  
 DPW / ADDITION / RENOVATIONS

OWNER:  
 TOWN OF LUNENBURG, VA  
 100 MAIN ST  
 LUNENBURG, VA 22972

ARCHITECT:  
**AHELENE-KARL**  
 ARCHITECTS, INC.  
 915 South Park, Chesapeake, VA 23041

CIVIL ENGINEER:  
**HELEN M. HARRIS, P.E.**  
 1000 W. MARKET ST., SUITE 100  
 ROANOKE, VA 24002-1827

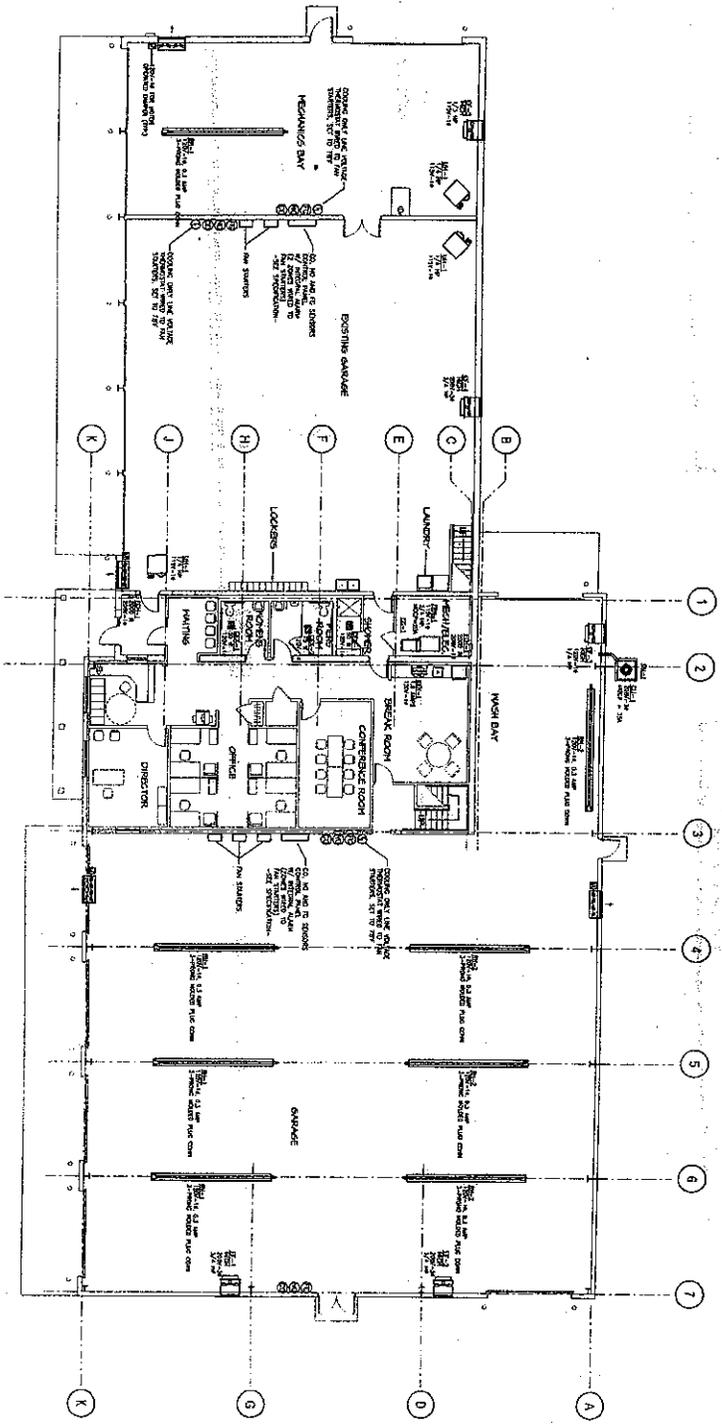
STRUCTURAL ENGINEER:  
**DR. JAMES W. HARRIS, P.E.**  
 1000 W. MARKET ST., SUITE 100  
 ROANOKE, VA 24002-1827

MUNICIPAL ENGINEER:  
**DR. JAMES W. HARRIS, P.E.**  
 1000 W. MARKET ST., SUITE 100  
 ROANOKE, VA 24002-1827

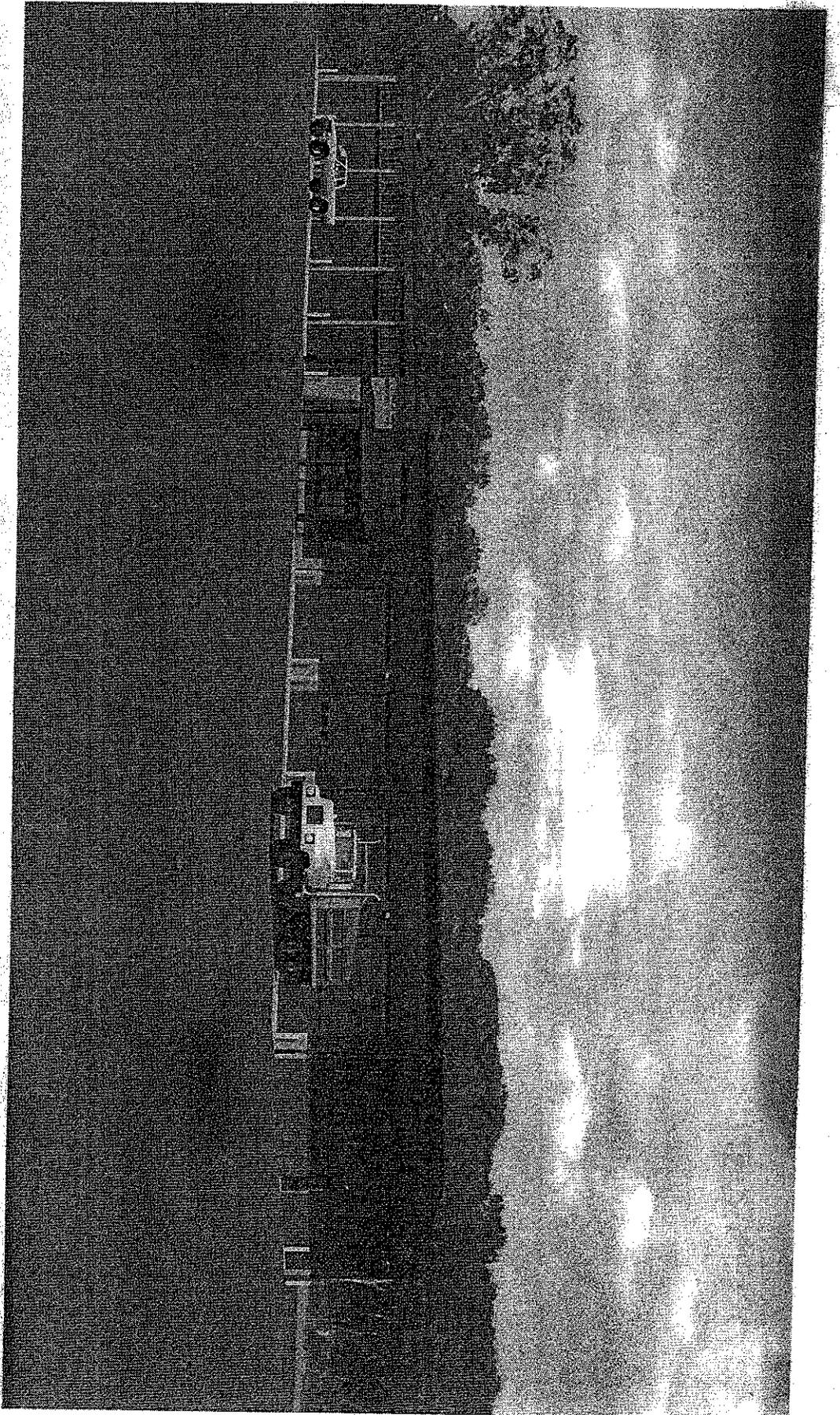
ELECTRICAL ENGINEER:  
**DAVID L. HARRIS, P.E.**  
 1000 W. MARKET ST., SUITE 100  
 ROANOKE, VA 24002-1827

NO.	DATE	DESCRIPTION
1	10/15/10	PROPOSED GROUND FLOOR PLAN

PROGRESS SET  
 NOT FOR CONSTRUCTION



PROPOSED GROUND FLOOR PLAN  
 SCALE: 1/8" = 1'-0"



DPW Renovations  
Rendering Image 1

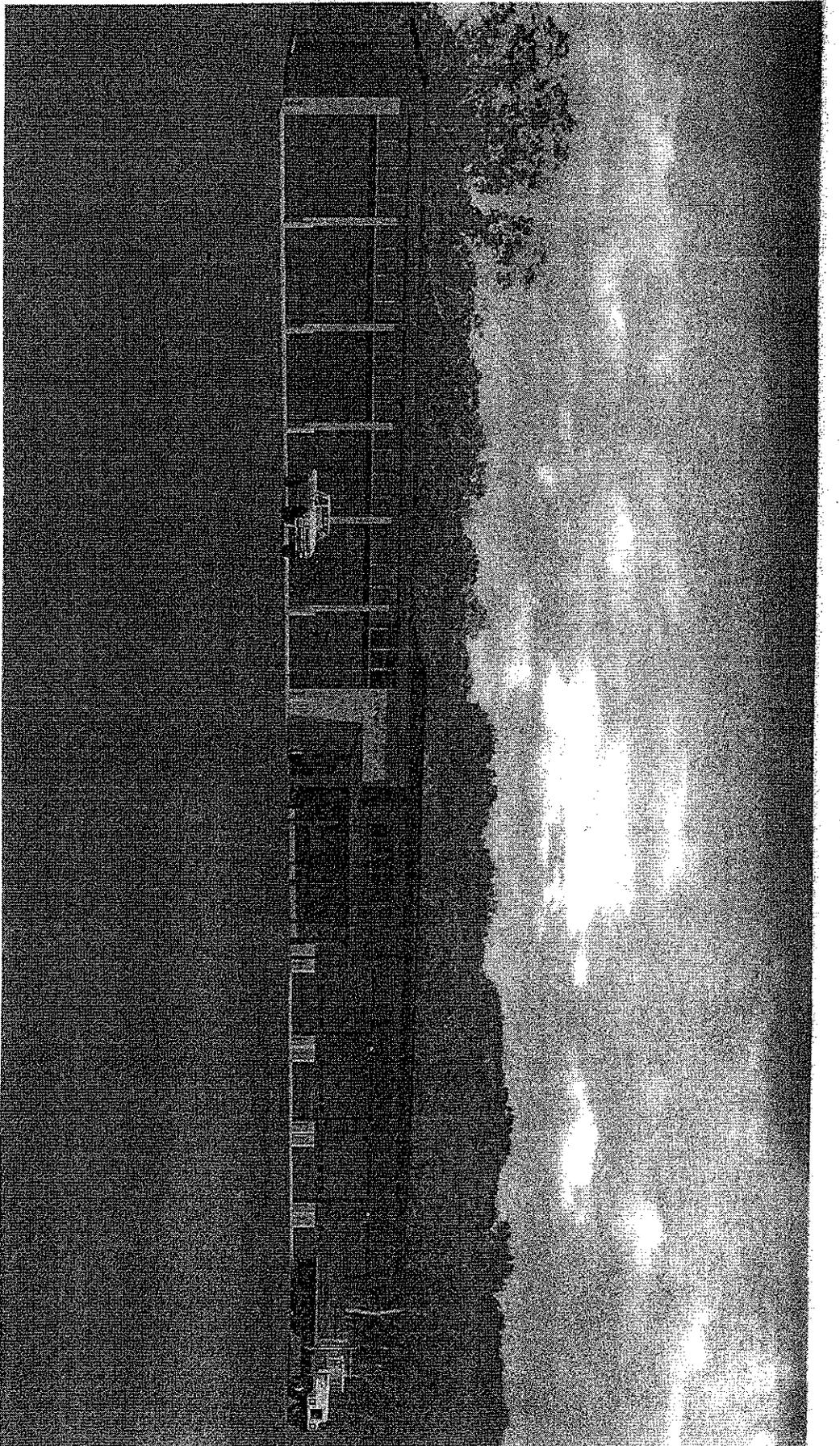
 **HELENE • KARL**  
Architects, Inc.



**DPW Renovations**  
**Rendering Image 2**



**HELENE • KARL**  
Architects, Inc.



CONCEPTUAL CONSTRUCTION COST ESTIMATE

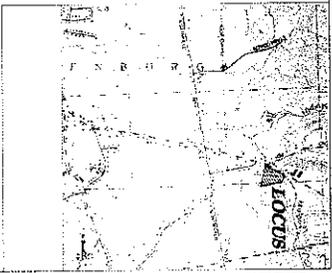
ITEM	UNIT	QUAN.	MATERIALS		LABOR				OTHER COST	LINE TOTAL
			UNIT COST	TOTAL COST	MANHOUR UNIT	TOTAL MANHOURS	WAGE RATE	TOTAL COST		
<b>DIVISION 1 - General</b>										
Supervision/General Conditions	WK	20		\$0	40.00	800	\$60.00	\$48,000		\$48,000
Project Management	WK	20	\$75.00	\$1,500	8.00	160	\$65.00	\$10,400		\$11,900
Temporary Facilities (1 trailer)	WK	20	\$400.00	\$8,000					\$1,500	\$9,500
Protection	WK	20	\$25.00	\$500	8.00	160	\$51.59	\$8,254	\$2,500	\$11,254
Demolition - General	LS	1	\$1,000.00	\$1,000	64.00	64	\$51.59	\$3,302	\$10,000	\$14,302
Dumpsters	EA	6	\$625.00	\$3,750	0.00	0	\$0.00	\$0		\$3,750
Material Handling/Equipment	WK	20	\$150.00	\$3,000	8.00	160	\$51.59	\$8,254		\$11,254
Clean-up	WK	20	\$25.00	\$500	8.00	160	\$51.59	\$8,254		\$8,754
Project Closeout	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$1,500	\$1,500
									Subtotal	\$120,215
<b>DIVISION 2 - Site Work</b>										
Hay Bale/Silt Fence	LF	500	\$3.00	\$1,500	0.05	25	\$51.59	\$1,290		\$2,790
Demolition/Excavation	CY	650	\$0.00	\$0	0.25	163	\$82.12	\$13,345	\$2,500	\$15,845
Septic System- Basic	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$30,000	\$30,000
Septic System - Pump Chamber	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$20,000	\$20,000
Oil Water Separator Tank	EA	1	\$5,500.00	\$5,500	48.00	48	\$82.12	\$3,942	\$2,500	\$11,942
2" Water Service Pipe	LF	100	\$4.25	\$425	0.30	30	\$71.41	\$2,142		\$2,567
Backfill	CY	300	\$4.65	\$1,395	0.25	75	\$82.12	\$6,159	\$1,500	\$9,054
Gravel	TON	300	\$9.00	\$2,700	0.10	30	\$82.12	\$2,464	\$1,200	\$6,364
Loam and Seed	SF	0	\$0.50	\$0	0.01	0	\$47.45	\$0		\$0
Miscellaneous (signs, etc.)	LS	1	\$500.00	\$500	16.00	16	\$67.56	\$1,081		\$1,581
									Subtotal	\$100,142
<b>DIVISION 3 - Concrete</b>										
Concrete - Foundations	CY	125	\$100.00	\$12,500	1.00	125	\$81.93	\$10,241		\$22,741
Concrete - Slabs	CY	225	\$100.00	\$22,500	1.50	338	\$81.93	\$27,651		\$50,151
Concrete Formwork	SF	5100	\$0.95	\$4,845	0.08	408	\$81.93	\$33,427		\$38,272
Reinforcement and Wire	TON	11	\$1,000.00	\$11,000	16.00	176	\$81.93	\$14,420		\$25,420
Miscellaneous	LS	1	\$1,200.00	\$1,200	120.00	120	\$81.93	\$9,832		\$11,032
									Subtotal	\$147,616
<b>DIVISION 4 - Masonry</b>										
CMU Interior Walls	SF	1000	\$3.50	\$3,500	0.25	250	\$94.69	\$23,673		\$27,173
Miscellaneous	LS	1	\$500.00	\$500	24.00	24	\$94.69	\$2,273		\$2,773
									Subtotal	\$29,946
<b>DIVISION 5 - Metals</b>										
Bollards	EA	20	\$200.00	\$4,000	2.00	40	\$71.24	\$2,850		\$6,850
Roof Seismic Upgrades	EA	30	\$100.00	\$3,000	2.50	75	\$94.69	\$7,102	\$500	\$10,602
Miscellaneous Metal	LS	1	\$600.00	\$600	16.00	16	\$94.69	\$1,515		\$2,115
									Subtotal	\$19,566
<b>DIVISION 6 - Wood and Plastic</b>										
Plywood Back-up	SF	2720	\$1.50	\$4,080	0.03	82	\$71.24	\$5,813		\$9,893
Counters	LF	10	\$65.00	\$650	0.75	8	\$71.24	\$534		\$1,184
Roof Blocking 2X	LF	3500	\$1.00	\$3,500	0.03	88	\$71.24	\$6,234		\$9,734
Miscellaneous - blocking, etc.	LS	1	\$250.00	\$250	16.00	16	\$71.24	\$1,140		\$1,390
									Subtotal	\$22,201
<b>DIVISION 7 - Thermal/Moisture</b>										
Perimeter Insulation	SF	2500	\$1.15	\$2,875	0.03	75	\$71.24	\$5,343		\$8,218
EPDM Roofing	SF	16500	\$6.50	\$107,250	0.02	330	\$83.34	\$27,502		\$134,752
Roof Insulation	SF	16500	\$1.15	\$18,975	0.02	330	\$83.34	\$27,502		\$46,477
Flashing - Edge	LF	800	\$8.00	\$6,400	0.10	80	\$83.34	\$6,667		\$13,067
Vapor Barrier	SF	10000	\$0.05	\$500	0.01	50	\$62.10	\$3,105		\$3,605
Firestopping	LS	1	\$150.00	\$150	12.00	12	\$62.10	\$745		\$895
Sealant and Caulk	LS	1	\$80.00	\$80	24.00	24	\$62.10	\$1,490		\$1,570
									Subtotal	\$208,585

CONCEPTUAL CONSTRUCTION COST ESTIMATE

ITEM	UNIT	QUAN.	MATERIALS		LABOR			OTHER COST	LINE TOTAL
			UNIT COST	TOTAL COST	MANHOUR/UNIT	TOTAL MANHOURS	WAGE RATE		
<b>DIVISION 8 - Doors/Windows</b>									
Metal Door with Vision Panel	EA	8	\$325.00	\$2,600	4.00	32	\$71.24	\$2,280	\$4,880
Interior Wood Doors	EA	10	\$235.00	\$2,350	2.00	20	\$71.24	\$1,425	\$3,775
Pass Window	EA	2	\$400.00	\$800	4.00	8	\$71.24	\$570	\$1,370
Metal Frames	EA	17	\$195.00	\$3,315	2.00	34	\$71.24	\$2,422	\$5,737
Windows - Addition	EA	9	\$375.00	\$3,375	3.00	27	\$71.24	\$1,923	\$5,298
Windows - Existing	EA	24	\$375.00	\$9,000	4.00	96	\$71.24	\$6,839	\$15,839
Overhead Doors w/ Motors	EA	12	\$4,800.00	\$57,600	16.00	192	\$71.24	\$13,678	\$71,278
Finish Hardware	EA	17	\$450.00	\$7,650	3.00	51	\$71.24	\$3,633	\$11,283
									Subtotal \$119,460
<b>DIVISION 9 - Finishes</b>									
Painting - Interior	SF	14000	\$0.25	\$3,500	0.02	280	\$79.29	\$22,201	\$25,701
VOT Floor	SF	4000	\$1.95	\$7,800	0.20	800	\$90.63	\$72,504	\$80,304
Vinyl Base	LF	600	\$1.00	\$600	0.03	18	\$90.63	\$1,631	\$2,231
Gypsum and Framing	SF	7000	\$3.95	\$27,650	0.04	245	\$85.46	\$20,938	\$48,588
Acoustical Ceilings	SF	3700	\$2.00	\$7,400	0.02	81	\$85.46	\$6,956	\$14,356
Ceramic Tile	SF	650	\$4.25	\$2,763	0.11	72	\$90.77	\$6,490	\$9,253
Miscellaneous Painting - exterior	SF	4000	\$0.30	\$1,200	0.03	120	\$79.29	\$9,515	\$11,715
								\$1,000	Subtotal \$192,148
<b>DIVISION 10 - Specialties</b>									
Logo Signage	EA	1	\$1,500.00	\$1,500	8.00	8	\$64.48	\$516	\$2,516
Fire Extinguisher	EA	5	\$125.00	\$625	1.00	5	\$64.48	\$322	\$947
Appliances	EA	2	\$475.00	\$950	2.00	1	\$64.48	\$64	\$1,014
Lockers / Bench	EA	12	\$200.00	\$2,400	1.50	18	\$81.93	\$1,475	\$3,875
Toilet Partitions	EA	1	\$850.00	\$850	4.00	4	\$71.24	\$285	\$1,135
Bathroom Accessories	EA	3	\$275.00	\$825	4.00	12	\$71.24	\$855	\$1,680
									Subtotal \$11,167
<b>DIVISION 11 - 12 Equipment and Furnishings</b>									
NOT USED									
<b>DIVISION 13 - Special Construction</b>									
Pre-Engineered Building	LS	1	\$145,000.00	\$145,000	0.00	0	\$0.00	\$0	\$145,000
Building Erection	LS	1	\$145,000.00	\$145,000	0.00	0	\$0.00	\$0	\$145,000
Entry Canopy	LS	1	\$7,500.00	\$7,500	0.00	0	\$0.00	\$0	\$7,500
									Subtotal \$297,500
<b>DIVISION 14 - Conveying Systems</b>									
NOT USED									
<b>DIVISION 15 - Plumbing</b>									
Water Closet (toilet)	EA	2	\$553.00	\$1,106	4.00	8	\$105.96	\$848	\$1,954
Water Closet Rough-In	EA	2	\$185.00	\$370	8.00	16	\$105.96	\$1,695	\$2,065
Lavatory and Faucet-Wall	EA	3	\$375.00	\$1,125	4.00	12	\$105.96	\$1,272	\$2,397
Lavatory Rough-In	EA	3	\$147.00	\$441	8.00	24	\$105.96	\$2,543	\$2,984
Urinal	EA	1	\$195.00	\$195	2.00	2	\$105.96	\$212	\$407
Urinal Rough-In	EA	1	\$65.00	\$65	4.00	4	\$105.96	\$424	\$489
Janitors Sink	EA	1	\$125.00	\$125	2.00	2	\$105.96	\$212	\$337
Janitors Sink Rough-In	EA	1	\$65.00	\$65	4.00	4	\$105.96	\$424	\$489
Shower and Faucet-Wall	EA	1	\$795.00	\$795	4.00	4	\$105.96	\$424	\$1,219
Shower Rough-In	EA	1	\$200.00	\$200	10.00	10	\$105.96	\$1,060	\$1,260
1/2" Type "L" Copper & Insul.	LF	200	\$2.10	\$420	0.20	40	\$105.96	\$4,238	\$4,658
3/4" Type "L" Copper & Insul.	LF	300	\$2.75	\$825	0.20	60	\$105.96	\$6,358	\$7,183
1" Type "L" Copper & Insul.	LF	20	\$3.48	\$70	0.40	8	\$105.96	\$848	\$917
1 1/4" Type "L" Copper & Insul.	LF	10	\$4.22	\$42	0.80	8	\$105.96	\$848	\$890
1 1/2" Type "L" Copper & Insul.	LF	10	\$5.11	\$51	0.80	8	\$105.96	\$848	\$899
2" Type "L" Copper & Insul.	LF	20	\$7.20	\$144	0.40	8	\$105.96	\$848	\$992
Emergency Eye Wash	EA	1	\$550.00	\$550	12.00	12	\$105.96	\$1,272	\$1,822
Hose Bibs	EA	5	\$50.00	\$250	1.00	5	\$105.96	\$530	\$780
Hose Bib Rough-In	EA	5	\$65.00	\$325	2.00	10	\$105.96	\$1,060	\$1,385
Water Fountain	EA	1	\$350.00	\$350	8.00	8	\$105.96	\$848	\$1,198
Miscellaneous Valves	EA	50	\$20.00	\$1,000	0.32	16	\$105.96	\$1,695	\$2,695
Backflow Preventer	EA	1	\$1,000.00	\$1,000	8.00	8	\$105.96	\$848	\$1,848
Sanitary & Vent Piping	LF	400	\$10.63	\$4,252	0.10	40	\$105.96	\$4,238	\$8,490
Wash Bay Equipment	EA	1	\$12,000.00	\$12,000	80.00	80	\$105.96	\$8,477	\$20,477
Water Heater	EA	1	\$1,500.00	\$1,500	32.00	32	\$105.96	\$3,391	\$4,891
Floor Drains (Trench)	LF	50	\$50.00	\$2,500	1.00	50	\$105.96	\$5,298	\$7,798
Compressed Air	LS	1	\$0.00	\$0	0.00	0	\$105.96	\$0	\$5,500
Miscellaneous	LS	1	\$300.00	\$300	8.00	8	\$88.61	\$709	\$1,009
									Subtotal \$87,030

CONCEPTUAL CONSTRUCTION COST ESTIMATE

ITEM	UNIT	QUAN.	MATERIALS		LABOR				OTHER COST	LINE TOTAL
			UNIT COST	TOTAL COST	MANHOUR UNIT	TOTAL MANHOURS	WAGE RATE	TOTAL COST		
<b>DIVISION 15 - Fire Protection</b>										
NOT USED										
<b>DIVISION 15 - Mechanical</b>										
Unit Heaters - Materials	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$12,000	\$12,000
Unit Heaters - Labor	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$4,500	\$4,500
Ductwork	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$16,000	\$16,000
Louvers	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$25,000	\$25,000
CO Detection System	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$17,000	\$17,000
Furnace, Cooling, Condensing	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$22,000	\$22,000
Garage Exhaust Fans	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$8,000	\$8,000
Radiant Heaters	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$8,000	\$8,000
Recessed Cabinet Heaters	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$2,000	\$2,000
Air Balancing	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$2,000	\$2,000
Miscellaneous	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$5,000	\$5,000
									Subtotal	\$121,500
<b>DIVISION 16 - Electrical</b>										
Service	LS	1	\$5,500.00	\$5,500	48.00	48	\$104.42	\$5,012		\$10,512
Connections to Mechanical	EA	18	\$150.00	\$2,700	2.00	36	\$104.42	\$3,759		\$6,459
Fire Alarm System	LS	1	\$5,500.00	\$5,500	120.00	120	\$104.42	\$12,530		\$18,030
Light Fixtures	EA	60	\$250.00	\$15,000	2.50	150	\$104.42	\$15,663		\$30,663
Receptacles	EA	50	\$75.00	\$3,750	4.00	200	\$104.42	\$20,884		\$24,634
Tele/Data Empty Conduit	LS	1	\$1,000.00	\$1,000	40.00	40	\$104.42	\$4,177		\$5,177
Tele/Data wiring & Equipment								\$15,000		\$15,000
Emergency Generator Hook-up	EA	1	\$0.00	\$0	0.00	0	\$104.42	\$0	\$6,000	\$6,000
Testing	LS	1	\$0.00	\$0	80.00	80	\$104.42	\$8,354		\$8,354
Commissioning	LS	1	\$0.00	\$0	40.00	40	\$104.42	\$4,177		\$4,177
									Subtotal	\$129,006
GRAND SUBTOTAL										\$1,606,082
OVERHEAD (10%)										\$160,608
SUBTOTAL										\$1,766,690
PROFIT (3%)										\$53,001
Building Permit (\$10/1000)										\$0
Bond (1.2%)										\$21,200
GRAND TOTAL										\$1,840,891



ZONING DISTRICT:  
 OVERLAY DISTRICT

1. THIS SHALL BE PART OF A SET OF DOCUMENTS SUBMITTED TO THE BOARD OF COUNTY COMMISSIONERS FOR THE REVIEW AND APPROVAL OF THE DEVELOPMENT OF THE PROJECT AND THE BOARD OF COUNTY COMMISSIONERS SHALL NOT BE BOUND BY ANY OTHER PART OF THIS SET OF DOCUMENTS.
2. PROPERTY LINES SHALL BE SHOWN AND BOUNDARY SURVEY SHALL BE PROVIDED BY THE PROPERTY OWNER AND SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE BOARD OF COUNTY COMMISSIONERS.
3. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE BOARD OF COUNTY COMMISSIONERS AND ALL APPLICABLE AGENCIES.
4. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE BOARD OF COUNTY COMMISSIONERS AND ALL APPLICABLE AGENCIES.
5. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE BOARD OF COUNTY COMMISSIONERS AND ALL APPLICABLE AGENCIES.

LOCATION:  
 SHOW:  
 PREPARED BY:  
 DATE: NOVEMBER 2010  
**PLACER**  
 SUBDIVISION  
 PROJECT NO. PLAN NO.



TOWN OF LUNENBURG  
 DPW ADDITION /  
 RENOVATIONS

OWNER:  
 TOWN OF LUNENBURG, VA  
 100 MARKET ST. #412  
 LUNENBURG, VA 22972

ARCHITECT:  
 HELENE + KARL  
 ARCHITECT, LLC  
 11 N. 15th St. - Charlottesville, VA 22902

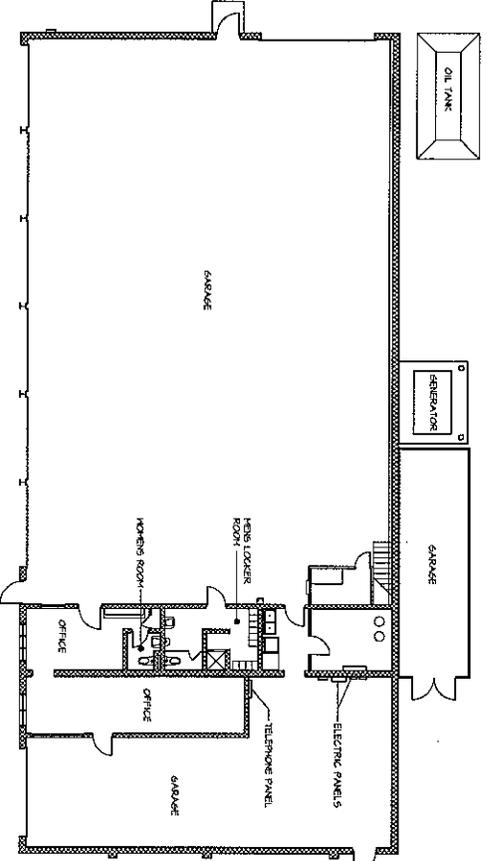
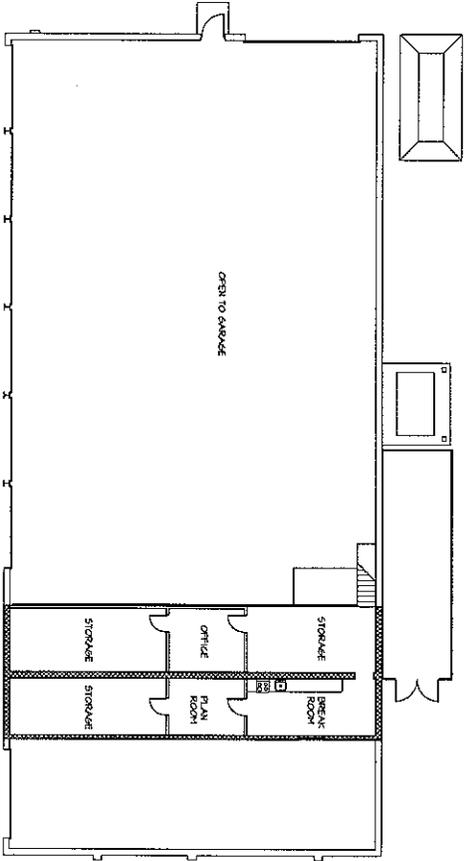
CIVIL ENGINEER:  
 PAUL S. SHERMAN, P.E.  
 1000 S. 1ST ST. #100  
 HOLLAND, VA 22943-1822

STRUCTURAL ENGINEER:  
 JAY ASSOCIATES, INC.  
 1000 S. 1ST ST. #100  
 HOLLAND, VA 22943-1822

MECHANICAL ENGINEER:  
 STANLEY DORSEY & COMPANY  
 1000 S. 1ST ST. #100  
 HOLLAND, VA 22943-1822

ELECTRICAL ENGINEER:  
 JOHN J. HARRIS, JR., ELECTRICAL  
 CONSULTANTS AND ENGINEERS, INC.  
 1000 S. 1ST ST. #100  
 HOLLAND, VA 22943-1822

NO.	DATE	DESCRIPTION
1	10/02/2023	ISSUED FOR PERMITS
2	10/02/2023	ISSUED FOR PERMITS
3	10/02/2023	ISSUED FOR PERMITS
4	10/02/2023	ISSUED FOR PERMITS
5	10/02/2023	ISSUED FOR PERMITS
6	10/02/2023	ISSUED FOR PERMITS
7	10/02/2023	ISSUED FOR PERMITS
8	10/02/2023	ISSUED FOR PERMITS
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96	10/02/2023	ISSUED FOR PERMITS
97	10/02/2023	ISSUED FOR PERMITS
98	10/02/2023	ISSUED FOR PERMITS
99	10/02/2023	ISSUED FOR PERMITS
100	10/02/2023	ISSUED FOR PERMITS



PROGRESS SET  
 NOT FOR CONSTRUCTION

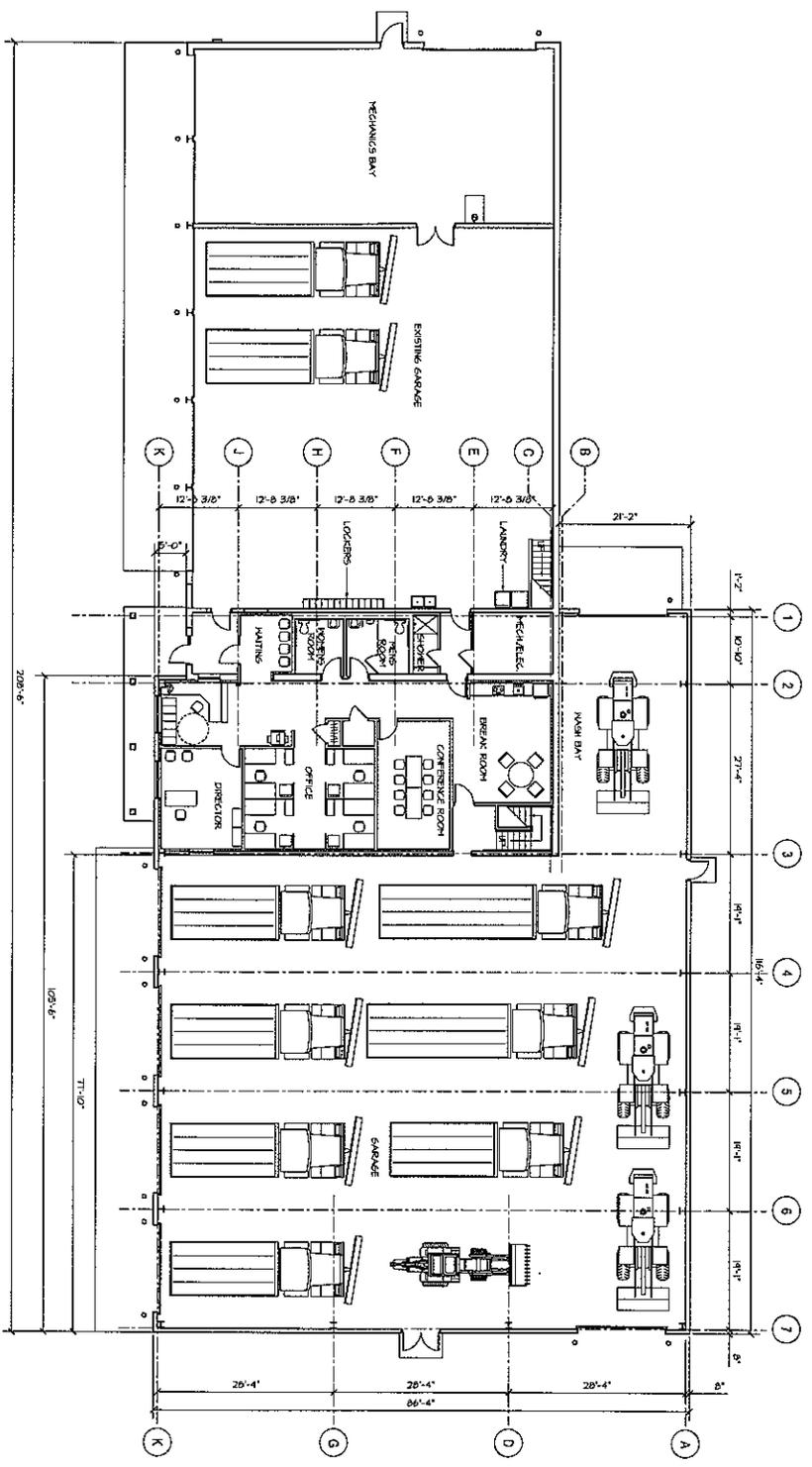


**TOWN OF LUNENBURG**  
 DPW ADDITION / RENOVATIONS

DATE: 01/20/2023  
 TOWN OF LUNENBURG, VA  
 505 CHURCH ST. 01462  
 LUNENBURG, VA 01462

ARCHITECT:  
**HELENE + KARL**  
 ARCHITECTS, INC.  
 31 S. WALTON DRIVE - COVEN 146 0199

DPW ENGINEER:  
 FLACK + KURTZ CONSULTING, INC.  
 1000 COMMONWEALTH BLVD. #100  
 HENRICO, VA 23220-1802  
 STRUCTURAL ENGINEER:  
 JLN ASSOCIATES, INC.  
 1000 COMMONWEALTH BLVD. #100  
 HENRICO, VA 23220  
 MECHANICAL ENGINEER:  
 ST. JOHN ENGINEERING CORP.  
 1000 COMMONWEALTH BLVD. #100  
 HENRICO, VA 23220  
 ELECTRICAL ENGINEER:  
 JOHN A. ANDREWS & ASSOCIATES, INC.  
 1000 COMMONWEALTH BLVD. #100  
 HENRICO, VA 23220



② PROPOSED GROUND FLOOR PLAN  
 SCALE: 1/8"=1'-0"

PROGRESS SET  
 NOT FOR CONSTRUCTION

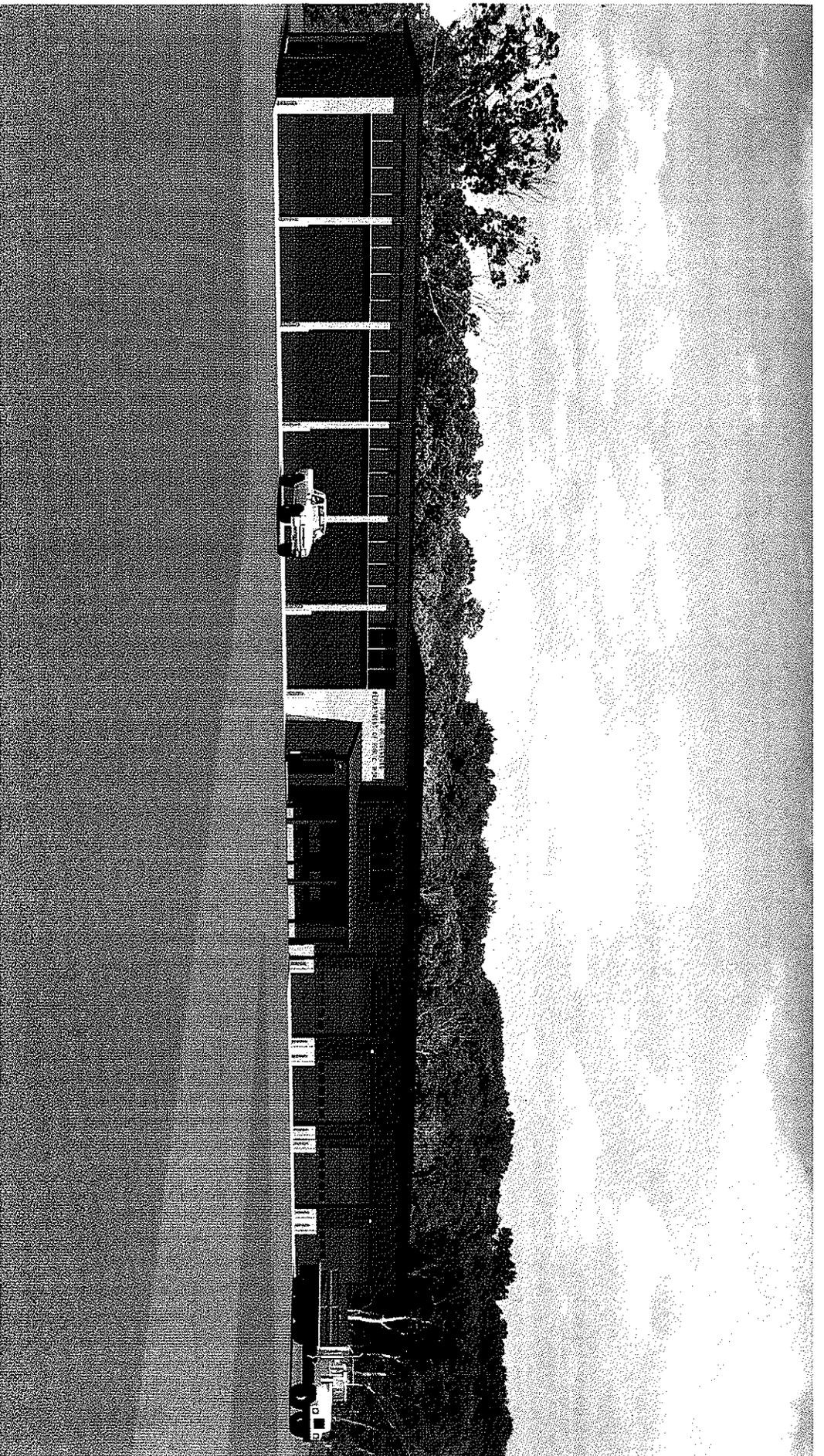
NO.	DATE	DESCRIPTION
1	01/20/2023	PROPOSED GROUND FLOOR PLAN
2		
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DPW Renovations  
Rendering Image 1

 **HELENE • KARL**  
Architects, Inc.



**DPW Renovations**  
**Rendering Image 2**

 **HELENE • KARL**  
Architects, Inc.

CONCEPTUAL CONSTRUCTION COST ESTIMATE

ITEM	UNIT	QUAN.	MATERIALS		LABOR			OTHER COST	LINE TOTAL
			UNIT COST	TOTAL COST	MANHOUR UNIT	TOTAL MANHOURS	WAGE RATE		
<b>DIVISION 1 - General</b>									
Supervision/General Conditions	WK	20		\$0	40.00	800	\$60.00	\$48,000	\$48,000
Project Management	WK	20	\$75.00	\$1,500	8.00	160	\$65.00	\$10,400	\$11,900
Temporary Facilities (1 trailer)	WK	20	\$400.00	\$8,000					\$9,500
Protection	WK	20	\$25.00	\$500	8.00	160	\$51.59	\$8,254	\$11,254
Demolition - General	LS	1	\$1,000.00	\$1,000	64.00	64	\$51.59	\$3,302	\$14,302
Dumpsters	EA	6	\$625.00	\$3,750	0.00	0	\$0.00	\$0	\$3,750
Material Handling/Equipment	WK	20	\$150.00	\$3,000	8.00	160	\$51.59	\$8,254	\$11,254
Clean-up	WK	20	\$25.00	\$500	8.00	160	\$51.59	\$8,254	\$8,754
Project Closeout	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$1,500
									Subtotal
									\$120,215
<b>DIVISION 2 - Site Work</b>									
Hay Bale/Silt Fence	LF	500	\$3.00	\$1,500	0.05	25	\$51.59	\$1,290	\$2,790
Demolition/Excavation	CY	650	\$0.00	\$0	0.25	163	\$82.12	\$13,345	\$15,845
Septic System- Basic	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$30,000
Septic System - Pump Chamber	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$20,000
Oil Water Separator Tank	EA	1	\$5,500.00	\$5,500	48.00	48	\$82.12	\$3,942	\$11,942
2" Water Service Pipe	LF	100	\$4.25	\$425	0.30	30	\$71.41	\$2,142	\$2,567
Backfill	CY	300	\$4.65	\$1,395	0.25	75	\$82.12	\$6,159	\$9,054
Gravel	TON	300	\$9.00	\$2,700	0.10	30	\$82.12	\$2,464	\$6,364
Loam and Seed	SF	0	\$0.50	\$0	0.01	0	\$47.45	\$0	\$0
Miscellaneous (signs, etc.)	LS	1	\$500.00	\$500	16.00	16	\$67.56	\$1,081	\$1,581
									Subtotal
									\$100,142
<b>DIVISION 3 - Concrete</b>									
Concrete - Foundations	CY	125	\$100.00	\$12,500	1.00	125	\$81.93	\$10,241	\$22,741
Concrete - Slabs	CY	225	\$100.00	\$22,500	1.50	338	\$81.93	\$27,651	\$50,151
Concrete Formwork	SF	5100	\$0.95	\$4,845	0.08	408	\$81.93	\$33,427	\$38,272
Reinforcement and Wire	TON	11	\$1,000.00	\$11,000	16.00	176	\$81.93	\$14,420	\$25,420
Miscellaneous	LS	1	\$1,200.00	\$1,200	120.00	120	\$81.93	\$9,832	\$11,032
									Subtotal
									\$147,616
<b>DIVISION 4 - Masonry</b>									
CMU Interior Walls	SF	1000	\$3.50	\$3,500	0.25	250	\$94.69	\$23,673	\$27,173
Miscellaneous	LS	1	\$500.00	\$500	24.00	24	\$94.69	\$2,273	\$2,773
									Subtotal
									\$29,945
<b>DIVISION 5 - Metals</b>									
Bollards	EA	20	\$200.00	\$4,000	2.00	40	\$71.24	\$2,850	\$6,850
Roof Seismic Upgrades	EA	30	\$100.00	\$3,000	2.50	75	\$94.69	\$7,102	\$10,602
Miscellaneous Metal	LS	1	\$600.00	\$600	16.00	16	\$94.69	\$1,515	\$2,115
									Subtotal
									\$19,566
<b>DIVISION 6 - Wood and Plastic</b>									
Plywood Back-up	SF	2720	\$1.50	\$4,080	0.03	82	\$71.24	\$5,813	\$9,893
Counters	LF	10	\$65.00	\$650	0.75	8	\$71.24	\$534	\$1,184
Roof Blocking 2X	LF	3500	\$1.00	\$3,500	0.03	88	\$71.24	\$6,234	\$9,734
Miscellaneous - blocking, etc.	LS	1	\$250.00	\$250	16.00	16	\$71.24	\$1,140	\$1,390
									Subtotal
									\$22,201
<b>DIVISION 7 - Thermal/Moisture</b>									
Perimeter Insulation	SF	2500	\$1.15	\$2,875	0.03	75	\$71.24	\$5,343	\$8,218
EPDM Roofing	SF	16500	\$6.50	\$107,250	0.02	330	\$83.34	\$27,502	\$134,752
Roof Insulation	SF	16500	\$1.15	\$18,975	0.02	330	\$83.34	\$27,502	\$46,477
Flashing - Edge	LF	800	\$8.00	\$6,400	0.10	80	\$83.34	\$6,667	\$13,067
Vapor Barrier	SF	10000	\$0.05	\$500	0.01	50	\$62.10	\$3,105	\$3,605
Firestopping	LS	1	\$150.00	\$150	12.00	12	\$62.10	\$745	\$895
Sealant and Caulk	LS	1	\$80.00	\$80	24.00	24	\$62.10	\$1,490	\$1,570
									Subtotal
									\$208,585

*New Roof ?*

CONCEPTUAL CONSTRUCTION COST ESTIMATE

ITEM	UNIT	QUAN.	MATERIALS		LABOR				OTHER COST	LINE TOTAL
			UNIT COST	TOTAL COST	MANHOUR UNIT	TOTAL MANHOURS	WAGE RATE	TOTAL COST		
<b>DIVISION 8 - Doors/Windows</b>										
Metal Door with Vision Panel	EA	8	\$325.00	\$2,600	4.00	32	\$71.24	\$2,280		\$4,880
Interior Wood Doors	EA	10	\$235.00	\$2,350	2.00	20	\$71.24	\$1,425		\$3,775
Pass Window	EA	2	\$400.00	\$800	4.00	8	\$71.24	\$570		\$1,370
Metal Frames	EA	17	\$195.00	\$3,315	2.00	34	\$71.24	\$2,422		\$5,737
Windows - Addition	EA	9	\$375.00	\$3,375	3.00	27	\$71.24	\$1,923		\$5,298
Windows - Existing	EA	24	\$375.00	\$9,000	4.00	96	\$71.24	\$6,839		\$15,839
Overhead Doors w/ Motors	EA	12	\$4,800.00	\$57,600	16.00	192	\$71.24	\$13,678		\$71,278
Finish Hardware	EA	17	\$450.00	\$7,650	3.00	51	\$71.24	\$3,633		\$11,283
									Subtotal	\$119,460
<b>DIVISION 9 - Finishes</b>										
Painting - Interior	SF	14000	\$0.25	\$3,500	0.02	280	\$79.29	\$22,201		\$25,701
VCT Floor	SF	4000	\$1.95	\$7,800	0.20	800	\$90.63	\$72,504		\$80,304
Vinyl Base	LF	600	\$1.00	\$600	0.03	18	\$90.63	\$1,631		\$2,231
Gypsum and Framing	SF	7000	\$3.95	\$27,650	0.04	245	\$85.46	\$20,938		\$48,588
Acoustical Ceilings	SF	3700	\$2.00	\$7,400	0.02	81	\$85.46	\$6,956		\$14,356
Ceramic Tile	SF	650	\$4.25	\$2,763	0.11	72	\$90.77	\$6,490		\$9,253
Miscellaneous Painting - exterior	SF	4000	\$0.30	\$1,200	0.03	120	\$79.29	\$9,515	\$1,000	\$11,715
									Subtotal	\$192,148
<b>DIVISION 10 - Specialties</b>										
Logo Signage	EA	1	\$1,500.00	\$1,500	8.00	8	\$64.48	\$516	\$500	\$2,516
Fire Extinguisher	EA	5	\$125.00	\$625	1.00	5	\$64.48	\$322		\$947
Appliances	EA	2	\$475.00	\$950	2.00	1	\$64.48	\$64		\$1,014
Lockers / Bench	EA	12	\$200.00	\$2,400	1.50	18	\$81.93	\$1,475		\$3,875
Toilet Partitions	EA	1	\$850.00	\$850	4.00	4	\$71.24	\$285		\$1,135
Bathroom Accessories	EA	3	\$275.00	\$825	4.00	12	\$71.24	\$855		\$1,680
									Subtotal	\$11,167
<b>DIVISION 11 - 12 Equipment and Furnishings</b>										
NOT USED										
<b>DIVISION 13 - Special Construction</b>										
Pre-Engineered Building	LS	1	\$145,000.00	\$145,000	0.00	0	\$0.00	\$0		\$145,000
Building Erection	LS	1	\$145,000.00	\$145,000	0.00	0	\$0.00	\$0		\$145,000
Entry Canopy	LS	1	\$7,500.00	\$7,500	0.00	0	\$0.00	\$0		\$7,500
									Subtotal	\$297,500
<b>DIVISION 14 - Conveying Systems</b>										
NOT USED										
<b>DIVISION 15 - Plumbing</b>										
Water Closet (toilet)	EA	2	\$553.00	\$1,106	4.00	8	\$105.96	\$848		\$1,954
Water Closet Rough-In	EA	2	\$185.00	\$370	8.00	16	\$105.96	\$1,695		\$2,065
Lavatory and Faucet-Wall	EA	3	\$375.00	\$1,125	4.00	12	\$105.96	\$1,272		\$2,397
Lavatory Rough-In	EA	3	\$147.00	\$441	8.00	24	\$105.96	\$2,543		\$2,984
Urinal	EA	1	\$195.00	\$195	2.00	2	\$105.96	\$212		\$407
Urinal Rough-In	EA	1	\$65.00	\$65	4.00	4	\$105.96	\$424		\$489
Janitors Sink	EA	1	\$125.00	\$125	2.00	2	\$105.96	\$212		\$337
Janitors Sink Rough-In	EA	1	\$65.00	\$65	4.00	4	\$105.96	\$424		\$489
Shower and Faucet-Wall	EA	1	\$795.00	\$795	4.00	4	\$105.96	\$424		\$1,219
Shower Rough-In	EA	1	\$200.00	\$200	10.00	10	\$105.96	\$1,060		\$1,260
1/2" Type "L" Copper & Insul.	LF	200	\$2.10	\$420	0.20	40	\$105.96	\$4,238		\$4,658
3/4" Type "L" Copper & Insul.	LF	300	\$2.75	\$825	0.20	60	\$105.96	\$6,358		\$7,183
1" Type "L" Copper & Insul.	LF	20	\$3.48	\$70	0.40	8	\$105.96	\$848		\$917
1 1/4" Type "L" Copper & Insul.	LF	10	\$4.22	\$42	0.80	8	\$105.96	\$848		\$890
1 1/2" Type "L" Copper & Insul.	LF	10	\$5.11	\$51	0.80	8	\$105.96	\$848		\$899
2" Type "L" Copper & Insul.	LF	20	\$7.20	\$144	0.40	8	\$105.96	\$848		\$992
Emergency Eye Wash	EA	1	\$550.00	\$550	12.00	12	\$105.96	\$1,272		\$1,822
Hose Bibs	EA	5	\$50.00	\$250	1.00	5	\$105.96	\$530		\$780
Hose Bib Rough-In	EA	5	\$65.00	\$325	2.00	10	\$105.96	\$1,060		\$1,385
Water Fountain	EA	1	\$350.00	\$350	8.00	8	\$105.96	\$848		\$1,198
Miscellaneous Valves	EA	50	\$20.00	\$1,000	0.32	16	\$105.96	\$1,695		\$2,695
Backflow Preventer	EA	1	\$1,000.00	\$1,000	8.00	8	\$105.96	\$848		\$1,848
Sanitary & Vent Piping	LF	400	\$10.63	\$4,252	0.10	40	\$105.96	\$4,238		\$8,490
Wash Bay Equipment	EA	1	\$12,000.00	\$12,000	80.00	80	\$105.96	\$8,477		\$20,477
Water Heater	EA	1	\$1,500.00	\$1,500	32.00	32	\$105.96	\$3,391		\$4,891
Floor Drains (Trench)	LF	50	\$50.00	\$2,500	1.00	50	\$105.96	\$5,298		\$7,798
Compressed Air	LS	1	\$0.00	\$0	0.00	0	\$105.96	\$0	\$5,500	\$5,500
Miscellaneous	LS	1	\$300.00	\$300	8.00	8	\$88.61	\$709		\$1,009
									Subtotal	\$87,030

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CONCEPTUAL CONSTRUCTION COST ESTIMATE

ITEM	UNIT	QUAN.	MATERIALS		LABOR			TOTAL COST	OTHER COST	LINE TOTAL
			UNIT COST	TOTAL COST	MANHOUR UNIT	TOTAL MANHOURS	WAGE RATE			
<b>DIVISION 15 - Fire Protection</b>										
NOT USED										
<b>DIVISION 15 - Mechanical</b>										
Unit Heaters - Materials	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$12,000	\$12,000
Unit Heaters - Labor	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$4,500	\$4,500
Ductwork	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$16,000	\$16,000
Louvers	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$25,000	\$25,000
CO Detection System	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$17,000	\$17,000
Furnace, Cooling, Condensing	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$22,000	\$22,000
Garage Exhaust Fans	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$8,000	\$8,000
Radiant Heaters	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$8,000	\$8,000
Recessed Cabinet Heaters	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$2,000	\$2,000
Air Balancing	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$2,000	\$2,000
Miscellaneous	LS	1	\$0.00	\$0	0.00	0	\$0.00	\$0	\$5,000	\$5,000
									Subtotal	\$121,500
<b>DIVISION 16 - Electrical</b>										
Service	LS	1	\$5,500.00	\$5,500	48.00	48	\$104.42	\$5,012		\$10,512
Connections to Mechanical	EA	18	\$150.00	\$2,700	2.00	36	\$104.42	\$3,759		\$6,459
Fire Alarm System	LS	1	\$5,500.00	\$5,500	120.00	120	\$104.42	\$12,530		\$18,030
Light Fixtures	EA	60	\$250.00	\$15,000	2.50	150	\$104.42	\$15,663		\$30,663
Receptacles	EA	50	\$75.00	\$3,750	4.00	200	\$104.42	\$20,884		\$24,634
Tel/Data Empty Conduit	LS	1	\$1,000.00	\$1,000	40.00	40	\$104.42	\$4,177		\$5,177
Tel/Data wiring & Equipment								\$15,000		\$15,000
Emergency Generator Hook-up	EA	1	\$0.00	\$0	0.00	0	\$104.42	\$0	\$6,000	\$6,000
Testing	LS	1	\$0.00	\$0	80.00	80	\$104.42	\$8,354		\$8,354
Commissioning	LS	1	\$0.00	\$0	40.00	40	\$104.42	\$4,177		\$4,177
									Subtotal	\$129,006
GRAND SUBTOTAL										\$1,606,082
OVERHEAD (10%)										\$160,608
SUBTOTAL										\$1,766,690
PROFIT (3%)										\$53,001
Building Permit (\$10/1000)										\$0
Bond (1.2%)										\$21,200
<b>GRAND TOTAL</b>										<b>\$1,840,891</b>

*Floor - 72K  
 Apron  
 Wash Bay  
 Mezzanine  
 Filter room*